CLAIMS

What is claimed is:

1. 1. A method comprising:

   requesting an InfiniBand connectivity configuration;

   receiving a response regarding whether the requested configuration can be

   provided; and

   attempting to establish the requested connectivity configuration if the response to

   the request is affirmative.

1. 2. The method of claim 1, wherein the requested connectivity configuration is not

   contained in the specification established for the InfiniBand architecture.

1. 3. The method of claim 1, wherein the requested connectivity configuration is

   comprised of a plurality of links.

1. 4. The method of claim 1, wherein the requested connectivity configuration is

   provided using a standard InfiniBand backplane connector.

1. 5. The method of claim 1, wherein said request for a connectivity configuration is

   made by an InfiniBand module to an InfiniBand chassis management entity.

1. 6. The method of claim 1, wherein said request for a connectivity configuration is

   made through an InfiniBand management link.

1   7.   The method of claim 6, wherein said request for a connectivity configuration is

2   written to a first management link configuration register and said response to said

3   request is written to a second management link configuration register.

1   8.   A method comprising:

2   receiving a connectivity configuration request associated with an InfiniBand

3   connector, the configuration request representing an expanded InfiniBand

4   connector configuration including information indicative of one or more

5   desired links to be established through the InfiniBand connector and

6   assigning one or more physical lanes of the InfiniBand connector to each

7   of the one or more desired links; and

8   configuring the InfiniBand connector in accordance with said connectivity

9   configuration request.

1   9.   The method of claim 8, wherein said connectivity configuration request is made

2   by an InfiniBand module and is received by an InfiniBand chassis management

3   entity.

1   10.   The method of claim 8, wherein said expanded InfiniBand connector

2   configuration is not contained in the specification established for the InfiniBand

3   architecture.

1   11.   The method of claim 8, wherein said expanded InfiniBand connector

2   configuration is comprised of a plurality of links.
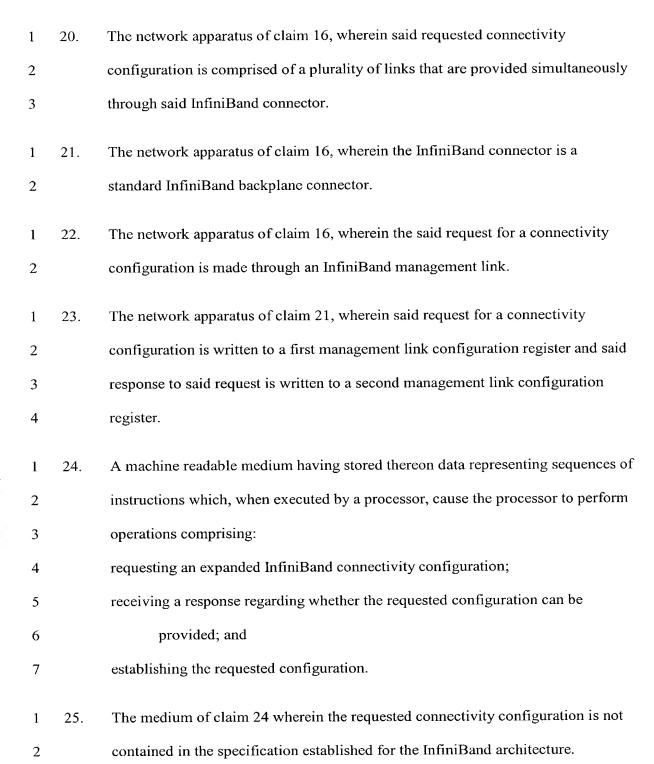
1   12.   A method comprising:

2   an InfiniBand management link operating to enable the establishment of an

3   InfiniBand connectivity configuration, wherein said management link:

4   records a request for a connectivity configuration made by an InfiniBand

5   module;

6   allows an InfiniBand chassis to obtain said request for a connectivity

7   configuration;

8   records a response from said InfiniBand chassis to said request for a

9   connectivity configuration; and

10   allows said InfiniBand module to obtain said response to said request for a

11   connectivity configuration.

1   13.   The method of claim 12, wherein said request for a connectivity configuration

2   requests an expanded configuration that is not contained in the specification

3   established for the InfiniBand architecture.

1   14.   The method of claim 12, wherein said request for a connectivity configuration is

2   written to a first management link configuration register and said response is

3   written to a second management link configuration register.

1   15.   The method of claim 12, wherein the requested connectivity configuration is

2   comprised of a plurality of links.

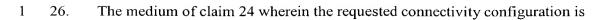1   16.   A network apparatus comprising:

2   an InfiniBand connector;

3   an InfiniBand module that is operable to make a request for an expanded

4   connectivity configuration for the InfiniBand connector;

5   a chassis management entity coupled to said InfiniBand module that receives the

6   request for an expanded connectivity configuration for the InfiniBand

7   connector and that provides a response regarding whether the requested

8   configuration can be provided.

1   17.   The network apparatus of claim 16, wherein said requested connectivity

2   configuration is not contained in the specification established for the InfiniBand

3   architecture.

1   18.   The network apparatus of claim 16, wherein the requested connectivity

2   configuration is other than:

3   a single link comprised of a connection to the first pin of a plurality of pins on the

4   InfiniBand connector;

5   a single link comprised of a connection to the first four pins of the plurality of

6   pins on the InfiniBand connector; or

7   a single link comprised of a connection to the first twelve pins of the plurality of

8   pins on the InfiniBand connector.

1   19.   The network apparatus of claim 16, wherein said InfiniBand module is operable

2   to establish the requested connectivity configuration if the response to said

3   connectivity request is affirmative.

1   20.   The network apparatus of claim 16, wherein said requested connectivity

2   configuration is comprised of a plurality of links that are provided simultaneously

3   through said InfiniBand connector.

1   21.   The network apparatus of claim 16, wherein the InfiniBand connector is a

2   standard InfiniBand backplane connector.

1   22.   The network apparatus of claim 16, wherein the said request for a connectivity

2   configuration is made through an InfiniBand management link.

1   23.   The network apparatus of claim 21, wherein said request for a connectivity

2   configuration is written to a first management link configuration register and said

3   response to said request is written to a second management link configuration

4   register.

1   24.   A machine readable medium having stored thereon data representing sequences of

2   instructions which, when executed by a processor, cause the processor to perform

3   operations comprising:

4   requesting an expanded InfiniBand connectivity configuration;

5   receiving a response regarding whether the requested configuration can be

6   provided; and

7   establishing the requested configuration.

1   25.   The medium of claim 24 wherein the requested connectivity configuration is not

2   contained in the specification established for the InfiniBand architecture.

1   26.   The medium of claim 24 wherein the requested connectivity configuration is

2   comprised of a plurality of links.